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Oral human papillomavirus (HPV) infection is associated with partner's genital HPV infectionZ.Z.A. Mbulawa^{1,*}, D.J. Marais², L.F. Johnson², D. Coetzee³, A.-L. Williamson⁴¹ University of Cape Town and National Institute for Communicable Disease, Cape Town, South Africa² University of Cape Town, Cape Town, South Africa³ University Of Cape Town, Cape Town, South Africa⁴ University of Cape Town and National Health

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Background: Human papillomavirus (HPV) is the causal agent of cancer of the oral cavity and oropharynx. Approximately 30% of cases of oral cancer cases are associated with HPV. Worldwide, the incidence of oral warts and cancer related to HPV is increasing, especially among human immunodeficiency virus (HIV) infected individuals, despite the use of highly active antiretroviral therapy. The objectives of the study were to investigate oral HPV prevalence and factors associated with oral HPV infection in an African setting.

Methods & Materials: Cervical, penile and oral HPV types were determined in 221 heterosexual couples by Roche Linear Array HPV genotyping assay.

Results: Oral HPV infection was observed in 8.4% (37/442) study participants. A total of 6.8% (15/221) women and 13.5% (22/221) men were oral HPV positive compared to 55% (121/219) of the cervical and 57% (120/210) of the penile specimens, with neither sex difference being statistically significant ($P=0.23$ and $P=0.69$ respectively). 13.5% (5/37) of study participants who were orally infected were infected with multiple HPV types (2–4 HPV types). In women, the risk of oral HPV infection were nearly significantly associated with oral sex (odds ratio (OR): 4.54, 95% confidence interval (CI): 0.94–21.93, $P=0.060$). The risk of oral infection with a specific HPV type in women was increased when the same type was detected in their genital tract (OR: 3.65, 95% CI: 1.62–8.25, $P=0.002$), the genital tract of their male partner (OR: 6.08, 95% CI: 2.90–12.73, $P<0.001$) or the mouth of their male partner (OR: 8.30, 95% CI: 1.58–43.50, $P=0.012$). In men, the risk of oral infection with a specific HPV type was increased when the same type was detected in the genital tract of their female partner (OR: 7.28, 95% CI: 1.45–36.58, $P=0.016$) or the mouth of their female partner (OR: 5.43, 95% CI: 0.79–37.06, $P=0.084$) but not when the same type was present in their own genital tract.

Conclusion: These findings suggest that in African settings oral HPV infection is acquired from sexual partners, and that in women it may also be the result of self-inoculation

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Increasing high-risk sexual behaviour for chlamydia infection among young adults in SwedenS.P.E. Sylvan¹, J. Hedlund^{2,*}¹ Uppsala University Hospital, Uppsala, Sweden² Uppsal University Hospital, Uppsala, Sweden

Background: The study was conducted in 2004 and repeated in 2011 to compare the contact tracing success rate of the partner notifying services routinely provided for *Chlamydia trachomatis* (CT)-cases by community-based youth health services in Uppsala County, Sweden.

Methods & Materials: Patients infected with CT were treated free at the youth health centres according to established local guidelines and subsequently participated in the partner notification service protocol in accordance with the Communicable Diseases Act.

Outcome measures for successful contact tracing for each episode was the confirmed attendance of a sexual contact within 12 months after the contact with the index case. Confirmation was obtained by letter or verbally by phone.

Results: The female index cases reported 660 male sexual partners in 2004 and 861 partners in 2001, giving a mean of 2.2 male partners in 2004 and 2.5 partners in 2011, respectively per index case. The proportion of female index cases with four partners or more during the 6-month period before diagnosis increased significantly ($p<0.01$) from 12% in 2004 to 20% in 2011. In this female high-risk group the mean number of male partners rose from 5.4 in 2004 to 5.6 in 2011 ($p<0.005$). For males, the number of sexual partner in this high-risk group increased significantly between 2004 and 2011 (mean number 5.2 in 2004 to 5.8 in 2011, $p<0.005$).

In 2004, successful partner notification was achieved for 71% of all male contacts, which was significantly higher ($p<0.005$) compared with 2011 when only 62% were successfully tested. Similarly, the success rate of partner notification for females decreased from 76% in 2004 to 68% in 2011 ($p<0.01$).

The success rate of the partner notification process was highly dependent on the size of the community where the contact tracing was performed. Unsuccessful contact tracing episodes were reported to the County Medical Officer significantly more often in 2011 ($p<0.005$).

Conclusion: The group of young adults with a high-risk sexual behaviour has increased in Uppsala County between 2004 and 2011 and the success rate in partner notification has decreased for this group. To increase cost-effectiveness selective screening and identifying high-risk individuals for CT are necessary.

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